

ACETYLCHOLINESTERASE AND RADIOACTIVE TRACER FOR IN VIVO RESEARCH OF ALZHEIMER'S DISEASE

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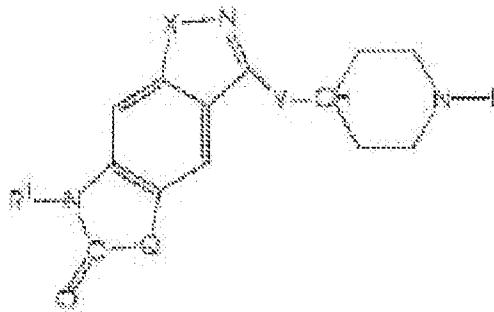
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Abstract of JP 2000351739 (A)

PROBLEM TO BE SOLVED: To diagnose the presence of the pathologic observation of Alzheimer's disease and other brain diseases and the severity and progress of the diseases by the brain tomography using a specific radioactive labeling compound. **SOLUTION:** A positron-emitting labeling compound of the formula [Q is (CH₂)_m, O or the like; X is O or S; Y is (CH₂)_m; L is a (substituted)phenyl or the like; R₁ is H or a 1-6C alkyl; (m) is 1-3] e.g.5,7-dihydro-7-[¹¹C]- methyl-3-[2-[1-(phenylmethyl)-4-piperidinyl]ethyl]-6H-pyrrolo[4,5-f]-1,2- benzisoxazol-6-one} and its pharmacologically permissible salt is injected into the blood flow of human and the brain is imaged by a positron-emitting tomography or a single photon emission computed tomography to form a brain image showing the position and relative amount of acetylcholinesterase. The presence and severity of Alzheimer's disease can be diagnosed by comparing the image with the image of normal brain.



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